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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,401	03/12/2004	Martin Kruppa	KRUPPA	7145
20151	7590	04/03/2006	EXAMINER	
HENRY M FEIEREISEN, LLC 350 FIFTH AVENUE SUITE 4714 NEW YORK, NY 10118			KRAUSE, JUSTIN MITCHELL	
			ART UNIT	PAPER NUMBER
			3682	

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/800,401

Applicant(s)

KRUPPA, MARTIN

Examiner

Justin Krause

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,6,7,17-21 and 24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1,6,7,17-21 and 24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of Species 5 in the reply filed on March 22, 2006 is acknowledged.
2. Claims 2-5, 8-16, 22-23 and 25-29 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on March 22, 2006.
3. Claims 1, 6, 7, 17-21 and 24 are currently pending.

***Drawings***

4. The drawings are objected to because paragraph 0033 which describes Fig. 5 in the specification makes reference to the central axial projection by character '11e' but then further refers to the central axial projection by '11c' as identified in the drawing. It is believed that '11e' is a typographical error.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 1 recites the limitation "the axial projection" in line 11 of claim 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 makes reference to a "central axial projection" in line 5, but is not clear whether the axial projection is the same as the central axial projection.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

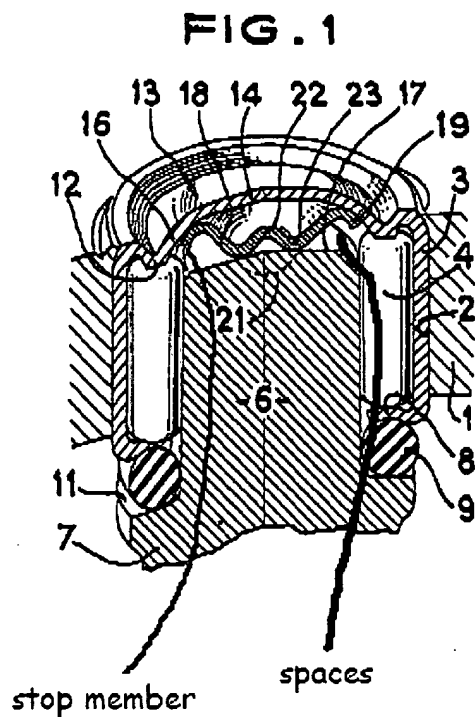
8. Claim 1, 6 and 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Pitner (US Patent 4,050,130).

Pitner discloses a bearing arrangement for supporting a universal joint trunnion in an outer cup comprising:

-a radial bearing having cylindrical rolling elements (4) disposed between the trunnion (6) and the cup (3); and

-an axial bearing having a resistance member (18 or 49) provided with a central axial projection (23 or 43) for support of an end surface (17) of the trunnion and having an outer surface resting against a bottom wall of the cup (19), wherein the resistance member is formed with openings or recesses (see fig below) spaced partially about its

circumference for defining spaces for lubricant alone or in combination with a configuration of the end surface of the trunnion, and wherein the resistance member is provided about its circumference with first stop members (see fig below) projecting axially toward the end surface of the trunnion and defined by a length which is shorter than a length of the axial projection as to define a gap between the stop members and a confronting portion of the end surface of the trunnion.



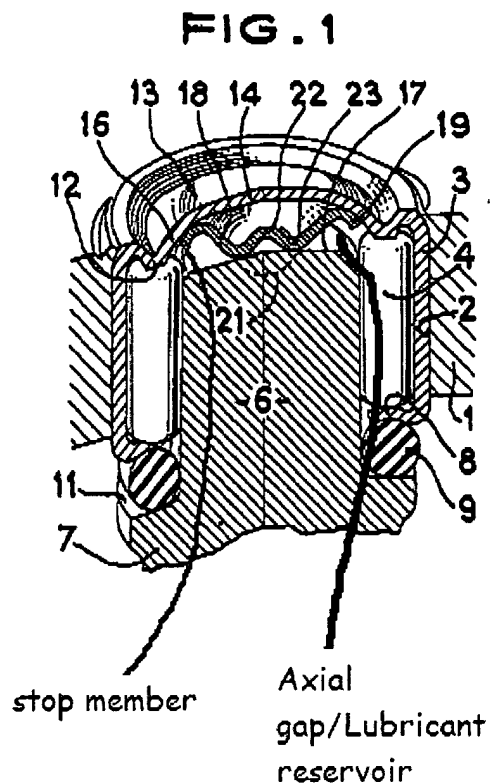
Regarding claim 6, the resistance member of the axial bearing is constructed to allow a multi-stepped support of the trunnion, when the trunnion is acted upon by an axial force.

Regarding claim 7, the resistance member forms an axial stop (42) for the rolling elements.

9. Claims 17-19, 21 and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Pitner (US Patent 4,050,130).

Pitner discloses the combination of:

- a universal joint (title) having a trunnion (6); and
- a bearing arrangement for supporting the trunnion (figs 1-14), said bearing arrangement comprising;
  - an outer cup (3) disposed in surrounding relationship of the trunnion;
  - a radial bearing having cylindrical rolling elements (4) disposed between the trunnion and the outer cup; and
  - a resistance member (18 or 49) made of a material to allow elastic deformation and bearing upon a confronting surface area of an end surface of the trunnion, and
  - a stop member (see fig below) maintaining an axial distance of the end surface of the trunnion in relation to the resistance member to thereby form part of a lubricant reservoir and defining an axial gap (see fig below) with the end surface of the trunnion, said stop member inhibiting an axial movement of the trunnion after the trunnion has moved in axial direction to close the gap.



Regarding claim 18, the end surface (19) of the trunnion has a substantially U-shaped configuration to define a base, said resistance member having an end wall (19), which abuts against a bottom wall of the outer cup, and including a central portion (23) to rest against the confronting surface area of the base to thereby demarcate a space forming another part of the lubricant reservoir.

Regarding claim 19, the resistance member has a collar (42) in a peripheral area of the resistance member for abutment against the rolling elements. (fig 5)

Regarding claim 21, the end surface of the trunnion has a beveled edge. (see fig 2 or fig 5)

Regarding claim 24, the end surface of the trunnion has a cylindrical configuration (figs 1-14)

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Pitner in view of Krude (US Patent 4,317,341).

Pitner discloses all of the claimed subject matter as described above, but does not show the stop member extending radially inwardly from the collar.

Krude teaches a resistance member (15) with a collar in a peripheral area of the resistance member for abutment against the rolling elements (12), the stop member extends radially inward from the collar to force lubricant to flow in the direction of the roller bearings. (col 3, line 38)






## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Krause whose telephone number is 571-272-3012. The examiner can normally be reached on Monday - Friday, 7:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMK  
3/30/06



RICHARD RIDLEY  
SUPERVISORY PATENT EXAMINER